

In the Claims:

Please cancel claim 7 without prejudice or disclaimer and amend the claims to read as follows:

I 1. (Six times amended) A DNA sequence encoding an antibody molecule or functional fragment thereof, comprising (i) a first variable domain, and (ii) a modification of an inter-domain interface as compared to a corresponding inter-domain interface of a parent antibody molecule or fragment thereof, wherein said modification results in said antibody molecule or functional fragment thereof demonstrating increased hydrophilicity as compared to said parent antibody molecule, and wherein said first variable domain is capable of interacting with a second variable domain to form a functional antibody molecule or fragment thereof.

I 2. (Four times amended) The DNA sequence according to claim 1 in which said modification comprises any two or more of:

a) a substitution of one or more amino acids at said region which comprised or would comprise the interface with amino acids which are more hydrophilic than the one or more amino acids being substituted for;

b) an insertion of one or more hydrophilic amino acids or insertion of amino acids; and

c) a deletion of one or more hydrophobic amino acids or deletion of amino acids.

I 3. 8. (Twice Amended) The DNA sequence according to claim 1, wherein said DNA sequence encodes a functional antibody fragment, and wherein said fragment is a Fab fragment.

9. (Twice Amended) The DNA sequence according to claim 1, wherein said DNA sequence encodes a functional antibody fragment, and wherein said fragment is an Fv fragment.

10. (Twice Amended) The DNA sequence according to claim 1, wherein said DNA sequence encodes a functional antibody fragment, and wherein said fragment is a scFv fragment.

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11. (Twice Amended) The DNA sequence according to claim 9, wherein said Fv fragment is stabilized by an inter-domain disulphide bond.

12. (Thrice Amended) The DNA sequence according to claim 9 or 11, wherein said variable domain is a variable light domain (VL) or a variable heavy domain (VH), and wherein said inter-domain interface comprises residues 9, 10, 12, 15, 39, 40, 41, 80, 81, 83, 103, 105, 106, 106A, 107, 108 for VL, and residues 9, 10, 11, 13, 14, 41, 42, 43, 84, 87, 89, 105, 108, 110, 112, 113 for VH.

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37. (Amended) A DNA sequence encoding a functional antibody fragment, comprising (i) a variable heavy domain, (ii) a variable light domain, and (iii) a modification of an inter-domain interface in said variable heavy or said variable light domain, as compared to a corresponding inter-domain interface of a parent antibody molecule or functional fragment thereof, wherein said modification results in said functional antibody fragment demonstrating increased hydrophilicity as compared to said parent antibody molecule, and wherein said variable heavy domain is capable of interacting with said variable light domain to form a functional scFv.

38. (Amended) A DNA sequence according to claim 37, comprising (i) a modification of an inter-domain interface in said variable heavy domain, as compared to a corresponding inter-domain interface of a parent antibody; and (ii) a modification of an

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inter-domain interface in said variable light domain, as compared to a corresponding inter-domain interface of a parent antibody.

Please add the following new claim(s):

39. (New) A DNA sequence encoding an antibody molecule or functional fragment thereof, comprising (i) a variable heavy domain, and (ii) a modified former interface between said variable heavy domain and constant heavy domain of a parent antibody molecule or functional fragment thereof, wherein said modification results in said antibody molecule or functional fragment thereof demonstrating increased hydrophilicity as compared to said parent antibody molecule, and wherein said first variable domain is capable of interacting with a second variable domain to form a functional antibody molecule or fragment thereof.

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40. (New) A DNA sequence encoding an antibody molecule or functional fragment thereof, comprising (i) a variable light domain, and (ii) a modified former interface between said variable light domain and constant light domain of a parent antibody molecule or functional fragment thereof, wherein said modification results in said antibody molecule or functional fragment thereof demonstrating increased hydrophilicity as compared to said parent antibody molecule, and wherein said first variable domain is capable of interacting with a second variable domain to form a functional antibody molecule or fragment thereof.

41. (New) The DNA sequence according to claim 37, wherein said inter-domain interface comprises residues 9, 10, 12, 15, 39, 40, 41, 80, 81, 83, 103, 105, 106, 106A, 107, 108 for the variable light domain, and residues 9, 10, 11, 13, 14, 41, 42, 43, 84, 87, 89, 105, 108, 110, 112, 113 for the variable heavy domain.
